

Docket No. RDID 0006US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Kalatz et al.

Application No.: 09/711,855

Group No.: 1631

Filed: Nov. 13, 2000

Examiner: Ly, Cheyne D

For: System for the Extrapolation of Glucose Concentration

AMENDMENT AND REPLY UNDER 37 C.F.R. 1.111

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

***Introductory Comments***

In response to the Official Action mailed February 24, 2003, a two-month extension of time, entry of the following amendments and consideration of the accompanying remarks is respectfully requested.

#18/E  
Plunkett  
7/30/03

AmOT/c

*Amendments to the Abstract*

~~A system~~ System for the extrapolation of a glucose concentration ~~comprising~~ has a data input device (EI) for entering administered insulin doses ( $H_i$ ) and their times of administration ( $t_i$ ), a data input device (~~EK~~) for entering the carbohydrates ( $KH_i$ ) consumed or to be consumed, a unit (~~GM~~) for determining an actual glucose concentration ( $G_a$ ) at a point in time ( $t_a$ ) in a patient's bodily fluid, a memory unit (~~M~~) ~~for storing the insulin doses that have been administered, their times of administration, carbohydrate units consumed and their times of consumption, and~~ an evaluation unit (CPU) for evaluation of the data stored in the memory unit, and for the extrapolation of a glucose concentration at a point in time  $t_p$ , whereby  $t_p$  is after  $t_a$ , ~~and in which the extrapolation comprises the following steps:~~

~~Determination of~~ The extrapolation includes determining the portion ( $I_{wirk}$ ) of insulin doses that become effective between  $t_a$  and  $t_p$ ;

~~Determination of~~ determining the portion of consumed carbohydrate units  $KH_{wirk}$ , that become effective between  $t_a$  and  $t_p$ , and determining

~~Determination of~~ an extrapolated glucose concentration  $G_p$  at the point in time  $t_p$  with consideration for  $I_{wirk}$  and  $KH_{wirk}$ .

~~The invention also provides a method for the extrapolation a glucose concentration and a system for the determination of insulin doses to be administered.~~